

REMARKS

Claims 1, 11, 13, and 16 are amended. Claims 3, 4, and 15 have been previously canceled. New claims 21-26 have been added. Thus, claims 1, 2, 5-14, and 16-26 are currently pending.

No new matter is being presented by way of these amendments. In particular, support for amendments to claims 1, 11, and 16 may be found at least in Figures 3A (showing a radio stack 40) and 4 (showing interaction between the radio stack and message dispatcher 38), and paragraphs 31 (describing a message being received by physical layer and then passed up to the next layer of the stack) and 33-34 (describing interaction between message dispatcher and radio stack, alteration of a field of a radio message, and transfer of a message up the radio stack), of Applicant's published patent application (U.S. Patent Application Pub. No. 2008/0027669). Furthermore, support for new claims 21-26 may be respectively found at least in paragraphs 33 (length field), 40 (network address field), 13 (encryption), 33 (inputting data), 34 (application layer), and 33 (physical layer and medium access control layer).

Interview Summary

Applicant thanks the Examiner for the courtesy and attention given during a telephonic interview on May 26, 2009. During the interview, Applicant's techniques, as recited by claim 1, were discussed in light of International Publication No. WO 00/51380 to Rimpela et al. ("Rimpela").

Claim Rejections under 35 U.S.C. §§ 102(b) and 103(a)

Claims 1-2, 6, 12-13, and 16-20 were rejected under 35 U.S.C. § 102(b) as being unpatentable over Rimpela. In addition, claims 5 and 10 were rejected as being unpatentable under 35 U.S.C. § 103(a) over Rimpela in view of allegedly admitted prior art. Furthermore, claims 7-9 and 14 were rejected as being unpatentable under 35 U.S.C. § 103(a) over Rimpela in view of alleged well known art.

Applicant's amended claims recite aspects nowhere taught, suggested, or motivated by Rimpela. In particular, claims 1, 11, and 16 recite details about altering radio

message data en route through a software radio stack. For example, independent claim 1, as amended, recites,

... altering data of a radio message en route through one of said plurality of logical layers of said software radio stack, by:
 receiving the radio message at a first layer of said plurality of logical layers of said software radio stack, the radio message comprising one or more fields;
 creating a modified radio message by modifying data of one of the fields of the received radio message; and
 transferring the modified radio message to a second layer of said plurality of logical layers of software radio stack.

Independent claims 11 and 16 include similar language.

Rimpela does not teach, suggest, or motivate altering data of a radio message by receiving a radio message, creating a modified radio message, and transferring the modified radio message, as recited by Applicant's independent claims. Instead, Rimpela appears to be focused on responding to a special test message received by a mobile station. In particular, Rimpela describes a testing apparatus that interacts with a test procedure 307 associated with protocol layers of a mobile station by way of special test messages. Rimpela, Abstract, Figure 3, and page 14, lines 20-26.

For discussion purposes, Figure 3 from Rimpela has been included below.

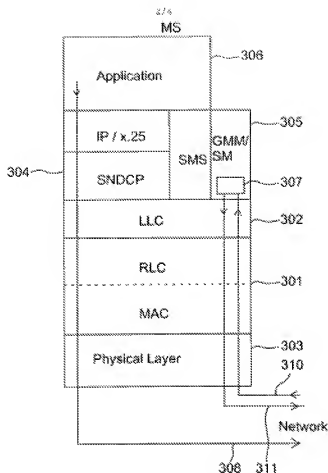


Fig. 3

As can be seen from Rimpela's Figure 3, the test procedure 307 receives a special test message 310. Rimpela, p. 15, line 34 – p. 16, line 8. In response, the test procedure 307 transmits uplink data 311. *Id.* Note that the test procedure 307 appears to be entirely decoupled from the ordinary operation of the protocol stack, as shown by a separate line as data transmission 308. Rimpela, p. 6, lines 24-31 (describing reference 308). In particular, data transmission 308 from the mobile station does not interact with the test procedure 307 in any way. Rimpela, Figure 3. Therefore, because test procedure 307 does not have access to the data transmission 308, the test procedure appears to be unable to alter the data transmission 308.

Furthermore, test messages 310 received or data 311 transmitted by the test procedure 307 do not reach the upper protocol layer 306, or otherwise pass through the test procedure 307 to some other layer or component of the mobile station. Rimpela, Figure 3; page

16, lines 3-6. Indeed, Rimpela's invention appears to be directed to entirely avoiding interaction with at least some of the layers of the protocol stack:

By means of the invention, the use of the uppermost protocol layers and applications is avoided in testing, wherein the tests can be applied already at the early stages of manufacture of mobile stations to test the functions of the RLC/MAC functions and the physical layer.

Rimpela, p. 9, lines 11-14, emphasis added.

Further to the specific claim language, Rimpela does not teach, suggest, or motivate the recited operations of "receiving the radio message," "creating a modified radio message," and "transferring the modified radio message," performed with respect to a "radio message en route through one of said plurality of logical layers of said software radio stack." More specifically, even if Rimpela's test message 310, uplink data 311, or data transmission 308 could be equated with the recited "radio message," Rimpela does not describe all of the recited operations. First, Rimpela's test message 310 cannot be equated with the recited "radio message," because Rimpela's test procedure 307 does not perform "creating a modified radio message by modifying data of one of the fields ..." or "transferring the modified radio message to a second layer..." Instead, the test procedure 307 receives the test message 310, and as such the test procedure 307 never modifies or transfers the test message 310. Second, Rimpela's uplink data 311 cannot be equated with the recited "radio message," because the test procedure 307 performs neither "receiving the radio message ..." nor "creating a modified radio message by modifying data of one of the fields ..." Instead, the uplink data 311 originates with the test procedure 307, and as such the test procedure 307 never receives or modifies the uplink data 311. Third, Rimpela's data transmission 308 cannot be equated with the recited "radio message," because the test procedure 307 simply does not interact with the data transmission in any way, and thus does not receive, modify, or transfer the data transmission 308.

Accordingly, Rimpela does not teach, suggest, or motivate "altering data of a radio message ... by: receiving the radio message ...; creating a modified radio message ...; and transferring the modified radio message ...," or similar language recited by independent claims 1, 11, and 16.

Conclusion

For at least the forgoing reasons, independent claims 1, 11, and 16 are allowable in view of Rimpela. In addition, dependent claims 2, 5-10, 12-14, 17-26 are believed to be allowable at least by virtue of their dependencies.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,
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